Application Serial No. 10/537,641
Reply to Office Action mailed September 2, 2010
RCE and Amendment dated December 2, 2010

IN THE CLAIMS

1. (Currently Amended) A nonwoven layer for a filter for a vacuum cleaner bag, the non-woven layer being a spunbond nonwoven layer and comprising at least one region having a surface area smaller than the filter, wherein only said at least one region is hot calendered so that and having an average pore size of the at least one region is smaller than 50 µm, the at least one region comprising and fibers being are bonded together such that a movement of the fibers relative to each other in a direction parallel to a surface of the region is inhibited, the at least one region is a het calendered region, and wherein the nonwoven layer is a spunbond nonwoven layer.

Cancelled.

- (Currently Amended) <u>The nonwoven Nenweven</u> layer according to claim 1, having a basis weight between 10 and 100 g/m² and wherein the spunbond fibers have an average fineness of 0.6-12 denier.
- 4. (Currently Amended) The Anonwoven layer for a filter for a vacuum cleaner bag, the non-woven layer being a spunbond nonwoven layer and comprising at least one region having a surface area smaller than the filter, wherein only said at least one region comprises an adhesive so that and having an average pore size of the at least one region is smaller than 50 µm, the at least one region comprising and fibers being are bonded together such that a movement of the fibers relative to each other in a direction parallel to a surface of the region is inhibited, the at least one region comprises an adhesive and wherein the norwoven layer is a spunbond nonwoven layer.
- (Previously Presented) The nonwoven layer according to claim 4, wherein the adhesive is a hotmelt, a cold glue, a dry-bond adhesive, a thermoplastic polymer, or mixtures thereof

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 (Previously Presented) The nonwoven layer according to claim 5, wherein the amount of hotmelt is between 1 and 10 q/m².

Cancelled.

- (Currently Amended) A composite layer for a filter for a vacuum cleaner bag, comprising:
 - a first nonwoven layer according to claim 3 4, and
 - a second nonwoven layer on top of the first nonwoven layer,

wherein an the adhesive is located at an interface between the first and second nonwoven layer such that fibers of the first or the second nonwoven layer or the first and the second nonwoven layer are bonded together and a movement of the fibers in the first or second nonwoven layer or the first and second nonwoven layer relative to each other in a direction parallel to a surface of the first layer or the second layer is inhibited.

(Previously Presented) The composite layer according to claim 8, wherein the second nonwoven layer is a meltblown nonwoven layer, and wherein the adhesive is a hotmelt.

Cancelled.

11. (Currently Amended) A method for producing a nonwoven layer for a filter wherein the nonwoven layer is a spunbond nonwoven layer and at least one region of the nonwoven layer has an average pore size smaller than 50 µm and comprises fibers being bonded together such that a movement of the fibers relative to each other in a direction parallel to a surface of the region is inhibited, the method comprising the steps of:

treating <u>only</u> at least one region of the nonwoven layer, the treated region having a smaller surface area than the filter such that the treated region has an average pore size smaller than 50 µm and such that the fibers are bonded together and a movement of the fibers relative to each other in a direction parallel to the surface of the region is inhibited, wherein the treating step comprises the steps of:

spraying of hotmelt, cold glue, dry-bond adhesive, thermoplastic polymer, or mixtures thereof, and

applying pressure to obtain a bonding of the fibers in the treated region.

12. (Currently Amended) A method for producing a nonwoven layer for a filter wherein the nonwoven layer is a spunbond nonwoven layer and at least one region of the nonwoven layer has an average pore size smaller than 50 µm and comprises fibers being bonded together such that a movement of the fibers relative to each other in a direction parallel to a surface of the region is inhibited, the method comprising the step of:

treating only at least one region of the nonwoven layer, the treated region having a smaller surface area than the filter such that the treated region has an average pore size smaller than 50 µm and such that the fibers are bonded together and a movement of the fibers relative to each other in a direction parallel to the surface of the region is inhibited, wherein the treating step comprises the step of hot calendering.

13. (Previously Presented) A method for producing a composite layer according to claim 8 comprising the steps of:

providing a first nonwoven layer,
applying an adhesive to the first nonwoven layer, and
providing a second nonwoven layer.

wherein an adhesive is located at an interface between the first and second nonwoven layer such that fibers of the first or the second nonwoven layer or the first and the second nonwoven layer are bonded together and a movement of the fibers in the first or second nonwoven layer or the first and the second nonwoven layer relative to each other in a direction parallel to the surface of the layer is inhibited.

14. (Previously Presented) The method according to claim 13, further comprising the step of applying pressure to obtain a bonding of the fibers.

15. (Currently Amended) A filter medium for a vacuum cleaner bag, comprising a filter structure comprising a surface or an interface of the filter structure provided with a filter paper layer defining a first region having a smaller surface area than the filter structure, the filter paper layer structure at the first region having reduced air permeability relative to a second region of the filter structure free of the filter paper layer.

16. (Previously Presented) The filter medium according to claim 15, wherein the filter paper layer is bonded to the filter structure.

17. (Previously Presented) The filter medium according to claim 16, wherein the filter paper layer is bonded using an adhesive wherein the adhesive is a hotmelt, a cold glue, a dry-bond adhesive, a thermoplastic polymer or mixtures thereof.

18. (Previously Presented) The filter medium according to claim 16, wherein the filter paper layer is bonded to the filter structure at discrete region.

19. (Previously Presented) The filter medium according to claim 15, wherein the filter structure comprises a nonwoven layer.

20. (Previously Presented) The filter medium according to one of the claim 15, wherein the filter structure comprises successively a spunbond, an air-laid, a spunbond, a meltblown, and a spunbond layer.

21. (Previously Presented) The filter medium according to claim 15, wherein the filter paper layer has an air permeability of at least about 250 l/m²/s.

22. (Currently Amended) A vacuum cleaner bag comprising a filter medium, the filter

medium comprising a filter structure wherein a surface or an interface of the filter structure is provided with a filter paper layer defining a first region having a smaller surface area than the filter structure, the filter paper layer structure at the first region having reduced air permeability relative to a second region of the filter structure free of the filter paper layer.

- 23. (Previously Presented) The vacuum cleaner bag according to claim 22, wherein the filter paper layer is provided at a region of a surface of the filter structure such that, in operation, the region is exposed directly to an airflow entering the bag.
- 24. (Previously Presented) The vacuum_cleaner bag according to claim 22 comprising two portions of filter medium wherein both portions are bonded together at an outer edge and wherein the first portion comprises an air inlet and the second portion comprises the filter paper layer at a region opposite to the air inlet.
- 25. (Previously Presented) The vacuum cleaner bag according to claim 22, wherein the filter paper layer is provided at the inner surface or the outer surface of the bag.
- 26. (Previously Presented) The nonwoven layer according to claim 4, wherein the adhesive is a pulverized polymer.
- 27. (Previously Presented) The method according to claim 11 wherein the polymer comprises a pulverized polymer.
- 28. (Previously Presented) The filter medium according to claim 15, wherein the filter paper layer has an air permeability of at least about 500 l/m²/s.
- 29. (Previously Presented) The filter medium according to claim 15, wherein the filter paper layer has an air permeability of at least about 600 l/m²/s.